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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,521	10/31/2000	Alexander Sherman		7227

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EXAMINER

POLLACK, MELVIN H

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/702,521	SHERMAN ET AL.	
	Examiner	Art Unit	
	Melvin H. Pollack	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached office action</u> . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/28/05 have been fully considered but they are not persuasive. The examiner has determined allowable subject matter within the specification, and will address this in a later section. The claims as currently drawn, however, remain taught by the previously cited combination.
2. The objection to the drawings has been withdrawn in light of the amendment.
3. The objection to the abstract has been withdrawn in light of the amendment.
4. The 112 rejections have been withdrawn in light of the amendment and accompanying remarks.
5. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the definition of a CDN (P. 8, lines 8-16)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In particular, there is nothing in the claims nor in the given definition of content servers in a content delivery network that suggests that the servers cannot host the same content, and in fact, the claims as currently drawn suggest an attempt by one server to synchronize with a second server, such attempt needing to be inhibited. To move the instant application away from mirrored networks or decision support system application systems, the applicant must amend the claims to express fundamental differences in functionality or structure that exist between the systems.

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6. In response to applicant's arguments, the recitation "content servers in a content delivery network" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

7. In response to applicant's argument that Ofek and Schmuck are both nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both teachings are drawn towards content servers that interact with clients to view and manage content files. Both are further drawn to methods of inhibiting a second server from rolling back legitimate changes made to a first server, and for the purpose of handling the applicant's problem wherein the second server attempts to change the first server, upon cases wherein the second server does not receive a timely message regarding legitimate changes to the first server. Thus, both are analogous art.

8. Applicant wishes for clarification regarding Ofek's write command and its relation to a purge request as claimed (P. 8, lines 17-25). Ofek teaches a collection of write commands, including creation and editing of a content file. Ofek does not expressly disclose deletion of a content file, and it was never the examiner's intention to suggest that Ofek teaches a purge

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command. However, the existence of expressly disclosed write commands suggests a framework upon which a delete command may be added given proper teachings and motivation. Schmuck provides both the delete command as part of the write command set, and further provides proper motivation therefore to include in Ofek.

9. Ofek, however, teaches aggregate modification of content files, wherein the content file is changed in some manner in both servers, and further where methods are taken to inhibit reversal of said modification. While Ofek doesn't list deletion of file as a modification, one of ordinary skill in the art at the time of invention would recognize the need for such a command, and further how to add one to the existing modification command set. Therefore, Ofek in view of Schmuck's deletion command as added to Ofek's command set reads on the claims as currently drawn.

10. Applicant requests clarification in regards to the RESTORE command as applied to the inhibiting function. (P. 9, lines 21-30). Suppose that a file is deleted from the first server, under Ofek in view of Schmuck. As taught, the second server automatically restores, via the restore command, the file to the first server if and only if there is an error. If the file is deleted legitimately, however, the lack of an error message causes the first server to inhibit the restore command, which then inhibits the second server from placing that file back on the first server.

11. Therefore, the rejection is maintained for the reasons above. This rejection is final.

Allowable Subject Matter

12. The following is an examiner's statement of reasons for allowance: the examiner has noted certain areas within the specification, particularly in structure and functionality of the particular CDN embodiment, that teach away from data mirroring.

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13. The specification teaches a primary embodiment wherein an administrator may select deletion of a particular file from either all of the servers or from a subset of the content servers (specification, Fig. 2 in view of P. 9, lines 14-15), wherein such deletions are carried out via a third server (Fig. 3, #300). By contrast, Ofek teaches an aggregate deletion for all servers. That is, Ofek teaches that a legitimately deleted file from the first server will eventually be deleted from the second server, with no method of user selection to keep the file existing on the second server while deleting it from the first server. Ofek, in fact, teaches away from said modifications, as it would wreck Ofek's express purpose of server mirroring.

14. In the discovered art, the primary purpose of a second server placing the file on the first server is to perform some form of synchronization and/or mirroring process. Therefore, the addition of the aforementioned limitations, with proper citations and remarks, would be considered novel and non-obvious to one of ordinary skill in the art.

15. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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17. Claims 1, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek (6,442,551) in view of Schmuck et al. (5,987,477).

18. For claim 1, Ofek teaches a method (abstract) for identifying and removing given content files (col. 1, line 1 – col. 6, line 40) from a set of content servers (Fig. 1) in a content delivery network (col. 7, line 40 – col. 9, line 5), wherein content servers share content files with each other, (col. 8, lines 30-60) comprising:

- a. Identifying content files to be modified within the content servers (col. 10, lines 30-45; col. 11, lines 10-20);
- b. Pushing an aggregate write request (col. 11, lines 10-20) to each of a set of staging servers (Fig. 1, CD), each aggregate purge request including an identifier for each content file to be removed from the content servers (Fig. 3, #65);
- c. Periodically, having each of the set of content servers obtain the aggregate write request from a given staging server (Fig. 3, #62 and 65), wherein the content servers obtain the aggregate write request from a given staging server (col. 10, line 30 – col. 11, line 30), wherein the content servers obtain the aggregate write request independently and at different times (Server 11 receives the signal at a different time from server 10, in both normal and independent mode); and
- d. At each content server, writing to the content server each content file identified in the aggregate write request (col. 10, line 30 – col. 11, line 30);
- e. Wherein after a first content server in the set of content servers has executed the aggregate write request, and as a result, has modified a given content file (col. 12, lines 45-60), inhibiting the first content server from receiving the original given content file

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from a second content server in the set of content servers with which the first content server shares content files if the second content server has not then executed the aggregate write request (col. 22, line 50 – col. 25, line 55).

19. Ofek does not expressly disclose that an aggregate write request includes an aggregate purge command. Instead, an aggregate generic write (and modify) command is used, as shown above. However, one of ordinary skill in the art would have noted that a delete file falls under the definition of a write file command. Further, the use of a Restore command for recovering files deleted due to failure (col. 22, lines 50-55) indicates that a file may be removed purposefully. Schmuck teaches a method (abstract) of performing content sharing among servers (col. 1, line 1 – col. 5, line 15) wherein files may be deleted from the content servers (col. 15, lines 55-65). At the time the invention was made, one of ordinary skill in the art would have used a Schmuck system in Ofek in order to perform proper synchronizations (Schmuck, col. 16, lines 50-55) in cases of Ofek's independence operations (col. 12, lines 10-30).

20. Ofek teaches a restore command in which the second server sends a copy of the deleted file to the first server if and only if the first server states that an error has occurred. By inhibiting the first server from sending the command, the second server is inhibited from sending the file that the first file deleted, the second server later deleting that file as well. Therefore, the limitations are fulfilled.

21. Claim 11 is drawn to the limitations in claims 1 and 6. Claim 11 adds the limitations that the content served comprise cache files, that a Web-based interface is used for identifying content files to be purged, and that a purge server is used for batching a set of purge requests into an aggregate purge request. Ofek teaches the batching process (col. 4, line 50 – col. 5, line 10)

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and web interface (Fig. 1, #13 and #40). Schmuck teaches caching (col. 20, lines 40-65; col. 24, line 45 – col. 26, line 30). Therefore, since claims 1 and 6 are rejected, claim 11 is also rejected for the reasons above.

22. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek and Schmuck as applied to claim 1 above, and further in view of Fox et al. (6,421,781).

23. For claim 2, Ofek and Schmuck do not expressly disclose that the aggregate purge request is pushed to the each of the set of staging servers over a secure link. Fox teaches a method (abstract) of securely handling push requests for an array of servers (col. 1, line 1 – col. 2, line 30) that utilize secure links in a push network (col. 4, lines 23-45; col. 8, line 10 – col. 10, line 25). At the time the invention was made, one of ordinary skill in the art would have used Fox security measures to block against integrity-damaging or access-damaging attacks (col. 8, lines 15-30).

24. Claims 3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek and Schmuck as applied to claim 1 above, and further in view of Garrity et al. (6,230,205).

25. For claim 3, Ofek and Schmuck do not expressly disclose that the aggregate purge request is pulled from the given staging server to each of the set of content servers over a secure link. Garrity teaches a method (abstract) of performing data transfer with a host of content servers (col. 1, line 1 – col. 2, line 50) wherein the pull network is secured (col. 4, lines 30-60). At the time the invention was made, one of ordinary skill in the art would have added Garrity security measures to secure data operations (col. 4, lines 40-42).

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26. For claim 6, Ofek and Schmuck do not expressly disclose the step of identifying the content files to be removed from the content servers includes the step of verifying that a user requesting removal is authorized to purge the content files. Garrity teaches that the CP server (Fig. 4, #402) allows a CP to manage delivery of content (col. 6, line 33), that a user may decide to delete data (col. 9, lines 11-13), and that consumers are verified by a user server (col. 7, lines 11-12). At the time the invention was made, one of ordinary skill in the art would have added Garrity security measures to secure data operations (col. 4, lines 40-42).

27. For claim 7, Ofek and Schmuck do not expressly disclose that the user is a content delivery network customer. Garrity teaches this limitation (col. 7, lines 12-13). At the time the invention was made, one of ordinary skill in the art would have added Garrity security measures to secure data operations (col. 4, lines 40-42).

28. For claim 8, Ofek and Schmuck do not expressly disclose that the user is a content delivery network administrator. Garrity teaches this limitation (Fig. 4, #420; col. 3, line 38). At the time the invention was made, one of ordinary skill in the art would have added Garrity security measures to secure data operations (col. 4, lines 40-42).

29. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek and Schmuck as applied to claim 1 above, and further in view of Dobbins et al. (US 2002/0066033).

30. For claim 4, Ofek and Schmuck do not expressly disclose issuing a notification that each content file identified in the aggregate purge request has been purged from the content delivery network. Dobbins teaches a method (abstract) of managing content from numerous content servers (background and summary) and specifically of session cancellations by way of a

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messaging service corresponding to notification of cancellation (p. 3, para. [0026]). At the time the invention was made, one of ordinary skill in the art would have added Dobbins messaging service to Ofek and Schmuck's content delivery management techniques in order to improve content delivery and to manage transfer of data within a communications system (p. 1, para. [0010]).

31. For claim 5, Ofek and Schmuck do not expressly disclose issuing a notification that each content file identified in the aggregate purge request has been accepted for purging. Dobbins teaches a method (abstract) of managing content from numerous content servers (background and summary) and specifically of session cancellations by way of a messaging service corresponding to notification of cancellation (p. 3, para. [0026]). At the time the invention was made, one of ordinary skill in the art would have added Dobbins messaging service to Ofek and Schmuck's content delivery management techniques in order to improve content delivery and to manage transfer of data within a communications system (p. 1, para. [0010]).

Conclusion

32. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H. Pollack whose telephone number is (571) 272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHP
13 March 2006


JASON CARDONE
SUPERVISORY PATENT EXAMINER